

Attorney's Docket No.: 10559-195001

## Remarks

Reconsideration and allowance of the above referenced application are respectfully requested.

Initially, the undersigned apologizes for the typographical and other informal errors in the claims, each of which have been corrected herewith. This correction of errors should also obviate the rejection under 35 USC 112, second paragraph.

Claims 3, 7, 10-12, 15-21, 31-34, 36 and 38 stand rejected under 35 USC 103a as being unpatentable over Suzuki and Nguyen. This contention is respectfully traversed. As described in previous amendments, the reasons for traversal are as follows:

First, with all due respect, Suzuki in view of Nguyen is an improper combination which would not have been made by one having ordinary skill in the art.

Suzuki at all teaches a device that plays music and admittedly obtains information about the music's beat, based on stored information about the music's beat. Suzuki determines whether the user is stepping at the right rhythm. Applicants contend that stepping at the right rhythm is very different than the claimed subject matter which requires "obtaining video data during the time of said gesture window and "investigating said frames to determine gesture probabilities for target gestures contained in said frames". Suzuki teaches stepping on a device. The rejection on page 10 alleges that stepping is a movement of

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the body and can be reasonably interpreted as a gesture. However, Suzuki does not teach determining gestures from video data as claimed. The undersigned continues to insist that determination of foot placement from a sensor is not the same as determining gesture probabilities for target gestures contained in frames of a video, as claimed.

Nguyen shows that a person of ordinary skill in the art would know how to collect gestures. However, the combination of Suzuki with Nguyen is not suggested by anything except the present specification. The statement in the official action that all judgments on obviousness are reconstructions based on hindsight is entirely beside the point. The combination DOES in fact rely on knowledge only from applicant's disclosure. Specifically, Suzuki teaches collecting stepping positions. Nguyen teaches collecting gestures, but teaches nothing about doing this for dance maneuvers. Real-time gesture recognition is entirely different than anything taught by Suzuki. Therefore, the combination between these references is based on hindsight. The incentive for making the combination is found in applicant's specification, not in the prior art.

Moreover, a person having ordinary skill in the art would not be expected to modify Suzuki to add probability of gesture recognition. Suzuki teaches a system for stepping on step sensors. A step sensor such as this is entirely a deterministic

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process, either it is stepped on or not. There is nothing that would suggest probability of stepping, this is simply inapplicable to the kind of device.

The previous response perhaps overstated the case when it stated that there was no teaching or suggestion of any kind of gesture probability in Nguyen. Admittedly, Nguyen does teach a confusion matrix, which could be considered as some kind of gesture probability. What Nguyen does not teach, however, is investigating segmented individual frames of video data to determine gesture probabilities for target gestures contained in said frames, as claimed. Nguyen does teach probability distributions for key points that indicate the likelihood of a particular observable output at that point. Nguyen teaches that once the particular data pattern is obtained, it is compared with previously stored known gestures to produce a confusion matrix. This does not teach determining gesture probabilities for target gestures in the frames as claimed. Rather, it teaches that "once a characteristic data pattern is obtained for the new gesture" (Nguyen column 2 lines 59-60) that a confusion matrix is obtained. The difference between the two is whether the frames are investigated to determine gesture probabilities for target gestures, as in the present system, or whether the frames are investigated to look for identified gestures, and determine a confusion matrix once those identified gestures are

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determined. Nguyen is an entirely different kind of system than the present system. It is not trying to recognize whether one of the gestures is a proper gesture at a specified time associated with the beat. Rather, it is trying to recognize the gestures themselves. Nguyen does not teach comparing the recognized gestures with a specified gesture.

Claims 34-39 should be allowable for reasons discussed above. Claims 34 defines extracting beat data automatically from the audio data. This is not taught or suggested by either Suzuki or Nguyen. Suzuki teaches storing the beat data along with the music, not extracting it.

With all due respect, all of the claims should hence be allowable for these reasons. To summarize the above, while Suzuki does teach a dance detecting device, it teaches nothing about how this would be done using a video recognition system. Nguyen teaches that gestures can be recognized in real-time. It teaches nothing about comparing these gestures with other gestures at a specified timing. The combination of these two references is made based on the teaching from the present specification, not from the teaching of the prior art itself. Moreover, even if combined, all but one would obtain is a Suzuki type system with a Nguyen type system of real-time gesture recognition. The hypothetical combination would teach nothing

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about comparing the recognize gesture with a specified gesture that was supposed to occur at the specified time.

Each of the claims should be allowable for these reasons.

It is believed that all of the pending claims have been addressed in this paper. However, failure to address a specific rejection, issue or comment, does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above are not intended to be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

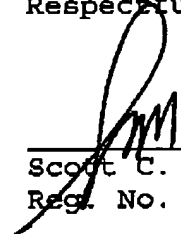
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Applicant asks that all claims be allowed. Applicant believes no fee is due, however, please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: \_\_\_\_\_

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